

WHAT IS CLAIMED IS:

1. In an encoder for encoding a media file so that it is capable of being decoded for playback as a media stream, a method for encoding data and time restriction information with said media file such that when said encoded media file is decoded for playback as said media stream, said data is reproduced in said media stream only during a time period predetermined by said time restriction information, comprising the steps of:

- (1) receiving a media file;
- (2) receiving at least one data file comprising at least one data segment;
- (3) receiving time restriction information for each said data segment that specifies said time period when said data segment is to be reproduced as part of said decoded media stream; and
- (4) embedding as part of said encoded media file each said data segment and said corresponding time restriction information such that said data segment is reproduced by a decoder during said specified time period.

2. The method of Claim 1, wherein said time restriction information comprises a start time tag that specifies when said time period is to begin.

3. The method of Claim 1, wherein said time restriction information comprises a stop time tag that specifies when said time period is to end.

4. The method of Claim 1, wherein said time restriction information comprises a start time tag that specifies when said time period is to begin and a stop time tag that specifies when said time period is to end.

5. The method of Claim 1, wherein the embedding in step (4) is such that said data is reproduced at a specified point in said media stream.

6. The method of Claim 1, wherein said data segment comprises a document file.

7. The method of Claim 1, wherein said data segment comprises an Internet address.

8. The method of Claim 1, wherein said media file is an audio file and said data segment is a non-audio data segment.

9. The method of Claim 8, wherein said audio file is an MP3 file.

10. In an encoder for encoding a media file so that it is capable of being decoded for playback as a media stream, a method for encoding a data segment and time restriction information for said segment with said media file such that when said encoded media file is decoded for playback as said media stream, said data segment is reproduced at a specified point in said media stream only during a time period predetermined by said time restriction information, comprising the steps of:

(a) receiving a media file;
(b) receiving a segment of data;
(c) receiving the specifics of said time period when said data segment is to be reproduced, including one of the following:

- i) a start time,
- ii) a stop time,
- iii) both a start and a stop time.

11. The method of Claim 10, wherein said media file is an audio file and said data segment is a non-audio data segment.

12. In a decoder for decoding an encoded media file for playback as a media stream, a method for decoding data and time restriction information from an encoded media file, comprising the steps of:

(1) receiving a block of said encoded media file;
(2) decoding a data segment embedded within said block;
(3) decoding said time restriction information embedded within said
block for said data segment, wherein said time restriction information specifies a time
period when said data segment is to be reproduced as part of said decoded media stream;
and
(4) reproducing said data segment at a specified point in said decoded
media stream for playback only during said specified time period.

13. The method of Claim 12, wherein said reproducing of said data segment
includes subsequent processing for enabling the data to be displayed to a user.

14. In a decoder for decoding an encoded media file for playback as a media
stream, a method for decoding an embedded data segment and time restriction
information from said encoded media file wherein said embedded data segment is to be
reproduced at a specified point in said media stream only during a time period
predetermined by said time restriction information, comprising the steps of:

(a) reading a block of said encoded media file;
(b) determining whether said embedded data segment exists within
said block;
(c) if said embedded data segment does not exist within said block,
then proceeding to step (p);
(d) determining whether a start time tag exists in said embedded
segment that specifies when said time period is to begin;
(e) if said start time tag does not exist, then proceeding to step (j);
(f) determining the start time specified by said start time tag;
(g) getting the current time;
(h) comparing said start time to the current time;
(i) if the current time is before said start time then proceeding to step
(p);

(j) determining whether a stop time tag exists in said embedded data segment that specifies when said time period is to end;

(k) if said stop time tag does not exist, then proceeding to step (o);

(l) determining the stop time specified in said stop time tag;

5 (m) comparing said stop time tag to the current time;

(n) if the current time is after said stop time then proceeding to step

(p);

(o) reproducing said embedded segment; and

(p) Continuing to step (a).

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15. The method of Claim 14 wherein said media file is an audio file and said embedded data segment is a non-audio data segment.

16. The method of Claim 14 wherein step (g) further includes the step of
15 proceeding to step (o) if no current time is available.

17. The method of Claim 14 wherein step (g) further includes the step of
proceeding to step (p) if no current time is available.

20 18. The method of Claim 16 wherein step (o) further includes the step of
determining whether said embedded segment is reproduced based on input from a user.

25 19. The method of Claim 14, wherein the reproducing of said embedded data
segment in step (o) includes subsequent processing for enabling the data to be displayed
to a user.

20. The method of Claim 19, wherein said embedded data segment is an
Internet address.

30 21. The method of Claim 20, wherein said processing includes linking to an
Internet document determined by said Internet address.

22. A system for encoding data and time restriction information with a media file and for the later decoding of said encoded media file such that when said encoded media file is decoded for playback as a media stream, said data is reproduced in said media stream only during a time period predetermined by said time restriction information, comprising:

an encoder operative to receive said media file, at least one data file comprising at least one data segment, and time restriction information for each said data segment and operative to embed as part of said media file said data segment and said corresponding time restriction information; and

a decoder operative to separate said encoded media file into said decoded media stream, said data segment and said time restriction information, and operative to playback said data segment as part of said decoded media stream only during said time period specified by said corresponding time restriction information.

23. A method for encoding and thereafter decoding a media file such that a data segment embedded in said media file after encoding is reproduced during decoding at a specified point during a predetermined time period for playback as a media stream for a user, comprising the steps of:

- (1) receiving a media file;
- (2) receiving at least one data file comprising at least one data segment;
- (3) receiving time restriction information for each said data segment that specifies said time period when said data segment is to be reproduced as part of said decoded media stream; and
- (4) embedding as part of said encoded media file each said data segment and said corresponding time restriction information such that said data segment is reproduced by a decoder during said specified time period;
- (5) receiving a block of said encoded media file;
- (6) decoding said data segment embedded within said block;

(7) decoding said time restriction information embedded within said block for said data segment, wherein said time restriction information specifies a time period when said data segment is to be reproduced as part of said decoded media stream; and

5 (8) reproducing said data segment at a specified point in said decoded media stream for playback only during said specified time period.

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